Message

From: Lindstrom, Andrew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=04BF7CF26AA44CE29763FBC1C1B2338E-LINDSTROM, ANDREW]

Sent: 6/7/2017 7:56:01 PM

To: Detlef Knappe [knappe@ncsu.edu]; Strynar, Mark [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=5a9910d5b38e471497bd875fd329a20a-Strynar, Mark]

Subject: RE: Response

Detlef,

Thanks for this response.

Sounds like OW to me. I'm glad that we at least provided this statement, but all of the nuance is removed. We're absolutely measuring GenX in the water downstream of Fayetteville. This is what a pledge of 99% emission control turns out to be. GenX in the finished drinking water at 631 ng/L. And then there's everything else.

I was happy to see that Mr. Hagerty captured a number of your precautionary thoughts in his article.

Thank you very much,

Andy

From: Detlef Knappe [mailto:knappe@ncsu.edu]

Sent: Wednesday, June 07, 2017 3:33 PM

To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>

Subject: Response

Based on what I know, this is EPA's response to Vaughn Hagerty:

Thanks for your patience. Please attribute our response below to an agency spokesperson:

Figure 2 of the paper specifically illustrates that GenX only makes up a small percentage of the total PFAS that were determined in this study. Many of these chemicals have very little data on which to make a judgement regarding their potential toxicity.

EPA received the chemical substance referred to as GenX as a new chemical notice from DuPont (which is now Chemours) in 2008. The substance is a perfluoroether derivative. EPA and the company signed a Consent Order in 2009 for the substance which required health and environmental testing, and also controlled worker exposures, environmental releases and the amount of impurities permissible in the final polymers. A Consent Order can require testing and restrictions as conditions. The Agency is analyzing the data it has received under the Consent Order.

In its review of the GenX premanufacture submission, EPA determined that the chemical could be commercialized if there were no releases to water. Under the terms of the Consent Order, for operations in the United States, DuPont is required to recover and capture (destroy) or recycle the chemical from all the process wastewater effluent streams and air emissions (point source and fugitive) at an overall efficiency rate of 99% (i.e., 99% of the chemical can't be released into the environment). Further, under the terms of the Consent Order, Dupont may only distribute the chemical to those customers, such as manufacturers and processers, that can also achieve this percentage of efficiency or destruction. An important next step is verifying the source of GenX in water.

Locally: Pittsboro indicated that they recently installed a 24/7 PAC Feed System, which is an effective treatment option for PFOA/PFOS. They also plan to conduct confirmatory sampling, which would provide results about the current PFOA/PFOS levels in the finished water. To date, Region 4 does not have any confirmatory sampling data for the Pittsboro community.

In December 2016, Region 4 reached out to the North Carolina Department of Health and Human Services (NC DHHS) to determine their awareness of the advisory and its recommendations. The Health Department acknowledged familiarity with the advisory but stated that they did not have authority to get involved. They stated they find the advisories difficult to implement at the state level, since they aren't regulated compounds.

Although Region 4 has confirmed that NC DEQ, NC DHHS and Town of Pittsboro are aware of the Final Health Advisory's recommendations, the sensitive population has not been notified in the Pittsboro community.

Nationally: EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act (SDWA). To regulate a contaminant under SDWA, EPA must find that it: (1) may have adverse health effects; (2) occurs frequently (or there is a substantial likelihood that it occurs frequently) at levels of public health concern; and (3) there is a meaningful opportunity for health risk reduction for people served by public water systems.

EPA included PFOA and PFOS among the contaminants for which water systems are required to monitor under the third Unregulated Contaminant Monitoring Rule (UCMR 3) in 2012. Results of this monitoring effort can be found on the publicly-available National Contaminant Occurrence Database (NCOD). In accordance with SDWA, EPA will consider the occurrence data from UCMR 3, along with the peer reviewed health effects assessments supporting the PFOA and PFOS Health Advisories, to make a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

EPA has conducted monitoring in the Cape Fear River Watershed for perfluorinated compounds. At this time, EPA Region 4 cannot advise on GenX compounds since the EPA does not have a drinking water advisory for these compounds. As noted in #3, EPA is evaluating PFOS and PFOA under the requirements of SDWA.

In 2006, EPA Region 4 has conducted research of perflourinated compounds in the Cape Fear Watershed. At that time, our investigations did not show impacts of concern to surface water or groundwater; therefore, did not contact the plant operator. Since the paper was published, EPA Region 4 has not contacted the plant operator regarding the findings.

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